AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS

1. (Canceled)

2. (Currently Amended) The network as defined in claim 14 ~~claim 1,~~ wherein the set of dynamic break loop logic functions are capable of being enabled or disabled.

3. (Previously Presented) The network as defined in claim 2, wherein the set of dynamic break loop logic functions comprise:

means for inserting the ID number of a source switch into each frame that is transmitted from the switch;

means for enabling a transmit function of each uplink port to monitor the ID number of each frame; and

means for enabling a receive function of each uplink port to monitor the ID number of each frame.

4. (Previously Presented) The network as defined in claim 3, wherein the set of dynamic break loop logic functions further comprises:

means for determining whether the ID number is not equal to the filter ID number, then the frame will pass unchanged; and

means for determining whether the ID number is equal to the filter ID number, then the frame will be cut off and will not be allowed to pass.

5. (Canceled)

6. (Previously Presented) The switch as defined in claim 15 ~~claim 5~~, wherein the set of dynamic break loop logic functions are capable of being enabled or disabled.

7. (Previously Presented) The switch as defined in claim 6, wherein the set of dynamic break loop logic functions comprise:

means for inserting the ID number of a source switch into each frame that is transmitted from the switch;

means for enabling a transmit function of each uplink port to monitor the ID number of each frame; and

means for enabling a receive function of each uplink port to monitor the ID number of each frame.

8. (Previously Presented) The switch as defined in claim 7, wherein the set of dynamic break loop logic functions further comprises:

means for determining whether the ID number is not equal to the filter ID number, then the frame will pass unchanged; and

means for determining whether the ID number is equal to the filter ID number, then the frame will be cut off and will not be allowed to pass.

9. (Original) A method of dynamically breaking a closed loop network, the network having a plurality of switches wherein each switch has two uplink ports and having a plurality of links connecting the plurality of switches into a closed loop, the method comprising:

inserting an ID number of a source switch into each frame that is transmitted from the switch;

enabling a transmit function of each uplink port to monitor the ID number of each frame;

enabling a receive function of each uplink port to monitor the ID number of each frame;

determining whether the ID number is not equal to a filter ID number, then the frame will pass unchanged; and

determining whether the ID number is equal to the filter ID number, then the frame will be cut off and will not be allowed to pass.

10. (Previously Presented) A method of configuring a dynamic break loop capable closed loop network having a plurality of switches wherein each switch has two uplink ports and each uplink port has a set of dynamic break loop logic functions and

having a plurality of links connecting the plurality of switches into a closed loop, wherein the set of dynamic break loop logic functions enables the network to operate dynamically as a plurality of open loop networks, the method comprising:

assigning a unique identification number to each of the plurality of switches;

determining at least one farthest switch in the network from each of the plurality of switches;

assigning a filter identification number to each of the plurality of switches based on said determining; and

enabling the set of dynamic break loop logic functions in at least one of the uplink ports in each of the plurality of switches, the set of dynamic break loop logic functions using the unique identification number and the filter identification number.

11. (Previously Presented) An apparatus for configuring a dynamic break loop capable closed loop network having a plurality of switches wherein each switch has two uplink ports and each uplink port has a set of dynamic break loop logic functions and having a plurality of links connecting the plurality of switches into a closed loop, wherein the set of dynamic break loop logic functions enables the network to operate dynamically as a plurality of open loop networks, the apparatus comprising:

means for assigning a unique identification number to each of the plurality of switches;

means for determining at least one farthest switch in the network from each of the plurality of switches;

means for assigning a filter identification number to each of the plurality of switches based on said at least one farthest switch; and

means for enabling the set of dynamic break loop logic functions in at least one of the uplink ports in each of the plurality of switches, the set of dynamic break loop logic functions using the unique identification number and the filter identification number.

12. (Withdrawn) An Ethernet frame having a destination address, a source address, a payload, and a Cyclic Redundancy Check value, the frame comprising a field containing an identification number for one of a plurality of switches in a dynamic break loop capable closed loop network.

13. (Withdrawn) The frame as defined in claim 12, wherein the field is located between the source address and the payload.

14. (Currently Amended) A dynamic break loop capable closed loop network comprising:

a plurality of switches wherein each switch has two uplink ports and each uplink port has a set of dynamic break loop logic functions; and

a plurality of links connecting the plurality of switches into a closed loop,

wherein the set of dynamic break loop logic functions enables the network to operate dynamically as a plurality of open loop networks using an ID number and a filter ID number set for each of the plurality of switches, ~~The network as defined in claim 1,~~

wherein the filter ID number is set based on at least one farthest switch in the network from each of the plurality of switches.

15. (Currently Amended) A switch for a dynamic break loop capable closed loop network, the switch comprising:

two uplink ports; and

a set of dynamic break loop logic functions provided for the uplink ports that enables the network to operate dynamically as a plurality of open loop networks using an ID number and a filter ID number set for each of the plurality of switches, ~~The switch as defined in claim 5,~~ wherein the filter ID number is set based on at least one farthest switch in the network from each of the plurality of switches.